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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,331	02/20/2004	Kenneth P. Blackmon	COS 818 / DC 1172	6888

7590 03/24/2005

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EXAMINER	
CHOI, LING SIU	
ART UNIT	**PAPER NUMBER**
1713	

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/783,331	BLACKMON ET AL.	
	Examiner	Art Unit	
	Ling-Siu Choi	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-19 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 20 February 2004 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-19 are now pending, wherein claims 1-11 are drawn to a method to prepare a stereo regular polypropylene; claims 12-19 are drawn to a method to prepare high-melt-flow-index polypropylene in the presence of a Ziegler catalyst.

Claim Objections

2. Claims 1-19 are objected to because of the following informalities: claim 1, line 13, "aluminum silicon" is suggested to be changed to –aluminum / silicon--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

> **A person shall be entitled to a patent unless --**
>
> **(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.**

4. Claims 1-19 are rejected under 35 U.S.C. 102(a) as being anticipated by Blackmon et al. (US 6,657,025 B2).

A method to prepare a stereo regular polypropylene	
a	providing a polymerization reactor under temperature and pressure conditions for polymerizing propylene
b	supplying a monomer stream containing propylene to the reactor
c	incorporating into the propylene monomer stream a titanium-based supported Ziegler-Natta catalyst having an internal electron donor wherein a titanium content ≥ 1.7 wt%
d	supplying to the propylene monomer stream a cocatalyst comprising trialkylaluminum wherein molar ratio of aluminum/titanium is in the range of 50-500
e	supplying to the propylene monomer stream a silicon-based external electron donor wherein the molar ratio of aluminum/silicon is in the range of 10-500
f	recovering polymer fluff which has a melt flow rate ≥ 200 gm/10 min and **a xylene soluble ≤ 4 wt%**

(summary of claim 1)

Blackmon et al. disclose a method to prepare polypropylene, the method comprising polymerizing propylene in the presence of a Ziegler-Natta catalyst component, an organoaluminum (TEAL), an external donor (CMDS, CPDS, or DIDS), and hydrogen, wherein the Ziegler-Natta catalyst component comprises a titanium compound, a magnesium compound, and diether internal donor (abstract; Examples 1-5; claim 1). Blackmon et al. further disclose that the Ziegler-Natta cattalyst component contains approximately 2.8 % titanium (col. 6, lines 58-60); the molar ratio of Al / Ti is 172.41 (Tabe 1 - Al / Ti = 1.0 mmol/ [(10 mg x 2.8%) / 47.867]; the molar ratio of Al / Si is 10 or 50 (Table 1); hydrogen levels is varied from 0.09 to 0.45 mol%

(col. 6, lines 64-65). Blackmon et al. furthermore disclose the polypropylene has a melt flow of at least about 300 g/10 min and **a xylene solubles of not more than about 3.5 wt%** (claim 1). Thus, the present claims are anticipated by the disclosure of Blackmon et al.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ling-Siu Choi whose telephone number is 571-272-1098.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reach on 571-272-1114.

LING-SUI CHOI
PRIMARY EXAMINER

March 15, 2005